

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A cassette device for supporting mother substrates having a length, a width and a thickness, the mother substrates including a plurality of panel regions of a liquid crystal display device and having a plurality of patterned spacers between the mother substrates, comprising:

a frame having a length, a width and a height, the length being substantially greater than the width, wherein the length and width of the frame corresponds to the length of width of inserted mother substrates, respectively;

a first plurality of support members protruding from a first side of the frame and a second plurality of support members protruding from a second opposing side[[s]] of the frame; and

at least two first rectangular supporting bars connected to at least two of the plurality of the first plurality of support members and second rectangular supporting bars connected to the second plurality of support members, wherein the supporting bars are disposed at a distance of about 170 mm from the frame,

wherein the first and second supporting bars contact and support a first lower surface of [[a]] inserted mother substrates along first and second parallel sides of the inserted mother substrates at opposing parallel regions of the first lower surface, wherein the first supporting bars are configured slightly spaced from each other and the second supporting bars are slightly spaced from each other, so that the first and second supporting bars are in contact with substantially the whole width of the of the first and second parallel sides of the inserted mother substrates to

uniformly distribute a load to the patterned spacers in substantially the whole width of the first and second parallel sides of the inserted mother substrates across the substrate.

2. (Original) The device according to claim 1, wherein the supporting bars include acetal resin material.

3. (Original) The device according to claim 1, wherein the supporting bars contact the substrate via surface contact.

4. (Currently Amended) A liquid crystal display panel supporting cassette device, the liquid crystal display panel having a length, a width and a thickness and including a plurality of panel regions having a plurality of patterned spacers, the cassette device comprising:

a frame having a length, a width and a height, the length being substantially greater than the width, wherein the length and width of the frame corresponds to the length and width of inserted liquid crystal display panels, respectively;

a first plurality of support members protruding from a first side of the frame and a second plurality of support members protruding from a second opposing side[[s]] of the frame; and

at least two first supporting bars connected to at least two of the plurality of the first plurality of support members and second supporting bars connected to the second plurality of support members, wherein the supporting bars are disposed at a distance of about 170 mm from the frame,

wherein the first and second supporting bars contact and support a first lower surface of an inserted liquid crystal display panel along first and second parallel sides of the inserted liquid crystal display panel at opposing parallel regions of the first lower surface, wherein the first supporting bars are slightly spaced from each other and the second supporting bars are slightly spaced from each other, so that the first and second supporting bars are in contact with substantially the whole width of the first and second parallel sides of the inserted liquid crystal display panel to uniformly distribute a load to the patterned spacers in substantially the whole width of the first and second parallel sides of the inserted liquid crystal display panel,

wherein the liquid crystal display panels include a first substrate having a plurality of thin film transistor arrays and a second substrate having a plurality of color filters such that the first and second substrates are bonded together.

5. (Previously Presented) The device according to claim 4, wherein the liquid crystal display panels further include a liquid crystal layer between the first and second substrates.

6. (Original) The device according to claim 5, wherein the liquid crystal layer is applied to at least one of the first substrate and the second substrate.

7. (Currently Amended) The device according to claim 1, wherein the first and second pluralities plurality of support members include[[s]] a first set of support members disposed to extend along a first plane within the frame and a second set of support members disposed to extend along a second plane different from the first plane within the frame.

8. (Previously Presented) The device according to claim 7, wherein each of the first and second sets of support members includes a first pair of support members extending from one of the opposing sides of the frame and a second pair of support members extending from another one of the opposing sides of the frame.

9. (Previously Presented) The device according to claim 3, wherein the substrates are transferred onto the supporting bars by a robot arm.

10. (Previously Presented) The device according to claim 8, wherein the supporting bars extend along the first parallel sides of the substrates.

11. (Previously Presented) The device according to claim 10, wherein the supporting bars extend past edge portions of the substrates along the first parallel sides of the substrates.

12. (Previously Presented) The device according to claim 8, wherein a total number of supporting bars is dependent upon a size of the frame.

13. (Currently Amended) The device according to claim 12, wherein the supporting bars prevent deformation of the liquid crystal display panels substrates.

14-25. (Cancelled)

26. (New) A method of supporting mother substrates, comprising:

providing a frame having a length, a width and a height, the length being substantially greater than the width;

providing a first plurality of support members protruding from a first side of the frame and a second plurality of support members protruding from a second opposing side of the frame;

providing first rectangular supporting bars connected to the first plurality of support members and second rectangular supporting bars connected to the second plurality of support members, wherein the supporting bars are disposed at a distance of about 170 mm from the frame; and

inserting mother substrates into the frame, the mother substrates including a plurality of panel regions of a liquid crystal display device having a plurality of patterned spacers between the mother substrates, the mother substrates having a length, a width and a thickness, wherein the mother substrates are inserted such that the length and width of the frame corresponds to the length of width of the inserted mother substrates,

wherein the first and second supporting bars contact and support a lower surface of the inserted mother substrates along first and second parallel sides of the inserted mother substrates at opposing parallel regions of the lower surface, wherein the first supporting bars are slightly spaced from each other and the second supporting bars are slightly spaced from each other, so that the first and second supporting bars are in contact with substantially the whole width of the of the first and second parallel sides of the inserted mother substrates to uniformly distribute a load to the patterned spacers in substantially the whole width of the first and second parallel sides of the inserted mother substrates.